Prevalence of SHV-extended spectrum β-lactamase producing carbapenem –resistant *Klebsiella pneumoniae* among patients with lower respiratory tract infections in Babylon Province-Iraq

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Abstract: This study was carried out to screen the prevalence of *Klebsiella pneumoniae* isolated from patients with lower respiratory tract infections in Babylon province. From December, 2015 to the end of March, 2016 ,a total of 100 sputum samples were collected from patients visited or hospitalized Merjan Teaching Hospital and Al-Hashimya General Hospital. Fifteenth (65%) isolates were identified as *Klebsiella pneumoniae*. All bacterial isolates were evaluated for extended spectrum β-lactamase (ESBL) production phenotypically using disk combination method. Eleven (73.3%) isolates were detected as ESBL-producers. Kirby-Bauer disk diffusion method was employed to determine resistance profile of ESBLs-positive isolates. Higher rates of resistance were observed for ampicillin and piperacillin antibiotics with (81.8%) and (72.7%) resistance rate, respectively, while the lowest rate was noticed for imipenem antibiotic (14.28%).Carbapenem-resistant isolates were investigated forbla_{SHV} gene by Polymerase Chain Reaction (PCR) method,2(100%) isolates gave positive results.

Keywords : *Klebsiella pneumoniae*, Lower respiratory tract infection, Antibiotics resistance, ESBL,bla_{SHV} gene,PCR.

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